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on May 18, 2007

PATENT  
Attorney Docket No.: 14538A-007510US

TOWNSEND and TOWNSEND and CREW LLP

By: 

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Bruce A. Edgar et al.

Application No.: 10/796,905

Filed: March 8, 2004

For: METHODS FOR IDENTIFYING  
RHEB EFFECTORS AS LEAD  
COMPOUNDS FOR DRUG  
DEVELOPMENT FOR DIABETES AND  
DISEASES ASSOCIATED WITH  
ABNORMAL CELL GROWTH

Confirmation No.: 1659

Examiner: Gerald R. Ewoldt

Art Unit: 1644

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08B are being called to the attention of the Examiner. In compliance with the requirements of 37 CFR §1.98(a)(2), copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Date: 18 May 2007

By: Brian W. Poor  
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Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete If Known</b>	
				Application Number	
				10796,905	
				Filing Date	
				March 8, 2004	
				First Named Inventor	
Edgar, Bruce A.					
Art Unit		1644			
Examiner Name		Gerald R. Ewoldt			
Attorney Docket Number		14538A-007510US			
Sheet	1	of	4		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. †	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AA	Brand and Perrimon, "Raf Acts Downstream of the EGF Receptor to Determine Dorsal-ventral Polarity During <i>Drosophila</i> Oogenesis," <i>Genes Dev.</i> 8:629-639 (1994).	<input type="checkbox"/>
	AB	Britton <i>et al.</i> , " <i>Drosophila</i> 's Insulin/PI3-kinase Pathway Coordinates Cellular Metabolism With Nutritional Conditions," <i>Dev. Cell</i> 2:239-249 (2002).	<input type="checkbox"/>
	AC	Clark <i>et al.</i> , "The Ras-related Protein Rheb is Farnesylated and Antagonizes Ras Signaling and Transformation," <i>J. Biol. Chem.</i> 272:10608-10615 (1997).	<input type="checkbox"/>
	AD	Dickson <i>et al.</i> , "Raf Functions Downstream of Ras1 in the Sevenless Signal Transduction Pathway," <i>Nature</i> 360:600-603 (1992).	<input type="checkbox"/>
	AE	Ellis <i>et al.</i> , "Expression of <i>Drosophila</i> Glass Protein and Evidence for Negative Regulation of its Activity in Non-neuronal Cells by Another DNA-binding Protein," <i>Development</i> 119:855-865 (1993).	<input type="checkbox"/>
	AF	Freeman, "Reiterative use of the EGF Receptor Triggers Differentiation of all Cell Types in the <i>Drosophila</i> Eye," <i>Cell</i> 87:651-660 (1996).	<input type="checkbox"/>
	AG	Gao <i>et al.</i> , " <i>Drosophila</i> PTEN Regulates Cell Growth and Proliferation Through PI3K-Dependent and -Independent Pathways," <i>Dev. Biol.</i> 221:404-418 (2000).	<input type="checkbox"/>
	AH	Gao and Pan, "TSC1 and TSC2 Tumor Suppressors Antagonize Insulin Signaling in Cell Growth," <i>Genes Dev.</i> 15:1383-1392 (2001).	<input type="checkbox"/>
	AI	Gao <i>et al.</i> , "Tsc Tumour Suppressor Proteins Antagonize Amino-acid-TOR Signaling," <i>Nat. Cell Biol.</i> 4:699-704 (2002).	<input type="checkbox"/>
	AJ	Goberdhan <i>et al.</i> , " <i>Drosophila</i> Tumor Suppressor PTEN Controls Cell Size and Number by Antagonizing the Chico/PI3-kinase Signaling Pathway," <i>Genes Dev.</i> 13:3244-3258 (1999).	<input type="checkbox"/>
	AK	Gromov <i>et al.</i> , "A Novel Approach for Expression Cloning of Small GTPases: Identification, Tissue Distribution and Chromosome Mapping of the Human Homolog of <i>rheb</i> ," <i>FEBS Lett.</i> 377:221-226 (1995).	<input type="checkbox"/>

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Applicant's unique citation designation number (optional). ‡ Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO				<b>Complete If Known</b> <b>Application Number</b> 10/796,905 <b>Filing Date</b> March 8, 2004 <b>First Named Inventor</b> Edgar, Bruce A. <b>Art Unit</b> 1644 <b>Examiner Name</b> Gerald R. Ewoldt <b>Attorney Docket Number</b> 14538A-007510US	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)					
Sheet	2	of	4		

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	AL	Huang <i>et al.</i> , "PTEN Affects Cell Size, Cell Proliferation and Apoptosis During <i>Drosophila</i> Eye Development," <i>Development</i> 126:5365-5372 (1999).	<input type="checkbox"/>	
	AM	Inoki <i>et al.</i> , "TSC2 is Phosphorylated and Inhibited by Akt and Suppresses mTOR Signaling," <i>Nat. Cell. Biol.</i> 4:648-657 (2002).	<input type="checkbox"/>	
	AN	Im <i>et al.</i> , "Rheb is in a High Activation State and Inhibits B-Raf Kinase in Mammalian Cells," <i>Oncogene</i> 21:6356-6365 (2002).	<input type="checkbox"/>	
	AO	Lee and Luo, "Mosaic Analysis with a Repressible Cell Marker for Studies of Gene Function in Neuronal Morphogenesis," <i>Neuron</i> 22:451-461 (1999).	<input type="checkbox"/>	
	AP	Mach <i>et al.</i> , "Loss of Rhl1, a Rheb-related GTPase in Fission Yeast, Causes Growth Arrest With a Terminal Phenotype Similar to that Caused by Nitrogen Starvation," <i>Genetics</i> 155:611-622 (2000).	<input type="checkbox"/>	
	AQ	Maheshwar <i>et al.</i> , "The GAP-related Domain of Tuberin, the Product of the TSC2 Gene, is a Target for Missense Mutations in Tuberous Sclerosis," <i>Hum. Mol. Genet.</i> 6:1991-1996 (1997).	<input type="checkbox"/>	
	AR	Manning <i>et al.</i> , "Identification of the Tuberous Sclerosis Complex-2 Tumor Suppressor Gene Product Tuberin as a Target of the Phosphoinositide 3-Kinase/Akt Pathway," <i>Mol. Cell.</i> 10:151-162 (2002).	<input type="checkbox"/>	
	AS	Miron <i>et al.</i> , "The Translational Inhibitor 4E-BP is an Effector of PI(3)K/Akt Signalling and Cell Growth in <i>Drosophila</i> ," <i>Nat. Cell. Bio.</i> 3:596-610 (2001).	<input type="checkbox"/>	
	AT	Montagne <i>et al.</i> , " <i>Drosophila</i> S6 Kinase: a Regulator of Cell Size," <i>Science</i> 285:2126-2129 (1999).	<input type="checkbox"/>	
	AU	Neufeld <i>et al.</i> , "Coordination of Growth and Cell Division in the <i>Drosophila</i> Wing," <i>Cell</i> 93:1183-1193 (1998).	<input type="checkbox"/>	
	AV	O'Connell and Rosbash, "Sequence, Structure, and Codon Preference of the <i>Drosophila</i> Ribosomal Protein 49 Gene," <i>Nucleic Acids Res.</i> 12:5495-6413 (1984).	<input type="checkbox"/>	

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				Art Unit	1644
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Sheet	3	of	4	Attorney Docket Number	14538A-007510US

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	AW	Oldham <i>et al.</i> , "Genetic and Biochemical Characterization of dTOR, the <i>Drosophila</i> Homolog of the Target of Rapamycin," <i>Genes Dev.</i> 14:2689-2694 (2000).	<input type="checkbox"/>	
	AX	Panepinto, "Expression of the <i>Aspergillus Fumigatus</i> Rheb Homologue, <i>rhbA</i> , is Induced by Nitrogen Starvation," <i>Fungal Genet Biol.</i> 36:207-214 (2002).	<input type="checkbox"/>	
	AY	Pignoni and Zipursky, "Induction of <i>Drosophila</i> Eye Development by Decapentaplegic," <i>Development</i> 124:271-278 (1997).	<input type="checkbox"/>	
	AZ	Potter and Xu, "Mechanisms of size control," <i>Curr. Opin. Genet. Dev.</i> 11:279-286 (2001).	<input type="checkbox"/>	
	BA	Potter <i>et al.</i> , " <i>Drosophila Tsc1</i> Functions with <i>Tsc2</i> to Antagonize Insulin Signaling in Regulating Cell Growth, Cell Proliferation, and Organ Size," <i>Cell</i> 105:357-368 (2001).	<input type="checkbox"/>	
	BB	Potter <i>et al.</i> , "Akt Regulates Ggrowth by Directly Phosphorylating <i>Tsc2</i> ," <i>Nat. Cell Biol.</i> 4:658-665 (2002).	<input type="checkbox"/>	
	BC	Prober and Edgar, "Ras1 Promotes Cellular Growth in the <i>Drosophila</i> Wing," <i>Cell</i> 100:435-446 (2000).	<input type="checkbox"/>	
	BD	Prober and Edgar, "Interactions between Ras1, dMyc, and dPI3K Signaling in the Developing <i>Drosophila</i> Wing," <i>Genes Dev.</i> 16:2286-2299 (2002).	<input type="checkbox"/>	
	BE	Radimerski <i>et al.</i> , "dS6K-regulated Cell Growth is dPKB/dPI(3)K-independent, but Requires dPDK1," <i>Nat. Cell Biol.</i> 4:251-255. (2002).	<input type="checkbox"/>	
	BF	Reuther and Der, "The Ras Branch of Small GTPases: Ras Family Members Don't Fall far From the Tree," <i>Curr. Opin. Cell. Bio.</i> 12:157-165 (2000).	<input type="checkbox"/>	
	BG	Robertson <i>et al.</i> , "A Stable Genomic Source of P Element Transposase in <i>Drosophila melanogaster</i> ," <i>Genetics</i> 118:461-470 (1988).	<input type="checkbox"/>	

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Sheet	4	of	4	Attorney Docket Number	14538A-007510US

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	BH	Schmelzle and Hall, "TOR, a Central Controller of Cell Growth," <i>Cell</i> 103:253-262 (2000).	<input type="checkbox"/>	
	BI	Struhl and Basler, "Organizing Activity of Wingless Protein in <i>Drosophila</i> ," <i>Cell</i> 72:527-540 (1993).	<input type="checkbox"/>	
	BJ	Tapon <i>et al.</i> , "The <i>Drosophila</i> Tuberous Sclerosis Complex Gene Homologs Restrict Cell Growth and Cell Proliferation," <i>Cell</i> 105:345-355 (2001).	<input type="checkbox"/>	
	BK	Toba <i>et al.</i> , "The Gene Search System: A Method for Efficient Detection and Rapid Molecular Identification of Genes in <i>Drosophila melanogaster</i> ," <i>Genetics</i> 151:725-737 (1999).	<input type="checkbox"/>	
	BL	Urano <i>et al.</i> , "The <i>Saccharomyces cerevisiae</i> Rheb G-protein is Involved in Regulating Canavanine Resistance and Arginine Uptake," <i>J. Biol. Chem.</i> 275:11198-11206 (2000).	<input type="checkbox"/>	
	BM	Weinkove and Leervers, "The Genetic Control of Organ Growth: Insights From <i>Drosophila</i> ," <i>Curr. Opin. Genet. Dev.</i> 10:75-80 (2000).	<input type="checkbox"/>	
	BN	Yamagata <i>et al.</i> , "Rheb, a Growth Factor- and Synaptic Activity-regulated Gene, Encodes a Novel Ras-related Protein," <i>J. Biol. Chem.</i> 269:16333-16339 (1994).	<input type="checkbox"/>	
	BO	Yee and Worley, "Rheb Interacts with Raf-1 Kinase and May Function to Integrate Growth Factor- and Protein Kinase A-dependent Signals," <i>Mol. Cell Biol.</i> 17:921-933 (1997).	<input type="checkbox"/>	
	BP	Young and Povey, "The Genetic Basis of Tuberous Sclerosis," <i>Mol. Med. Today</i> 4:313-319 (1998).	<input type="checkbox"/>	
	BQ	Zhang <i>et al.</i> , "Regulation of Cellular Growth by the <i>Drosophila</i> Target of Rapamycin dTOR," <i>Genes Dev.</i> 14:2712-2724 (2000).	<input type="checkbox"/>	

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